

Federal Communications Commission
1270 Fairfield Road
Gettysburg, PA 17325

6 August 2002

RE: Alliant Energy Reply Comments for NPRM WT DOCKET NO. 02-55

To whom it may concern:

Alliant Energy is the holding company of Interstate Power and Light Company (IP&L) and Wisconsin Power and Light (WP&L). IP&L provides electric, gas and steam services in Iowa, Minnesota and Illinois. WP&L provides electric, gas and water utility services in Wisconsin. Both subsidiaries have significant operational and financial investments in their 800 MHz wide-area private radio systems, which are operated over more than 120 sites covering over 75,000 square mile of rural service territory.

Alliant Energy has reviewed and supports the NPRM comments filed by United Telecom Council ("UTC") and other entities, including but not limited to:

- National Rural Electric Cooperative Association (NRECA)
- Cynergy
- Xcel Energy Services, Inc.
- Entergy Corporation & Entergy Services, Inc
- Illinois Power Company
- Southern LINC ("Southern")
- Motorola (technical comments only)
- EF Johnson (technical comments only)
- US Cellular (technical comments only)

Alliant faces many of the same geographical, operational and financial challenges with our communications infrastructure, as do the utility entities mentioned above. Alliant relies on its 800 MHz wide-area private radio systems to support our critical infrastructure and we share their same concerns with the NPRM.

Alliant Energy's concerns are summarized in the attached Reply Comments and can be summarized as follows:

- Alliant Energy considers itself a critical infrastructure provider and does not favor re-banding that would prevent interoperation between public safety spectrum and critical infrastructure spectrum.
- Alliant Energy strongly opposes the Nextel proposal and feels Nextel would unduly benefit from it.
- Alliant Energy finds that all of the proposed plans will create unnecessary interruption of service and heavy expense.
- While the interference issue is of serious concern, Alliant and many other entities have not experienced interference on its systems and would NOT benefit from re-banding and should NOT have to pay for relocation.
- If Alliant Energy were forced to relocate out of the 800 MHz band, the system replacement cost would easily exceed 25 million dollars and would directly impact the customer rate base.
- Alliant believes a market-based approach would provide the most inexpensive and effective means to resolving interference without involving other licensees.
- Most recently, the "Private Wireless Coalition" (PWC) has presented the idea of another alternate re-banding plan. Aside from the "market-based approach", the basis of this plan appears to be the least harmful of all the proposed plans, however, Alliant has concerns about funding for relocation, the actual band plan layout, the technical standards imposed, and the impact the plan may have on the use of private iDEN in the band.

Alliant Energy respectfully submits these Reply Comments for the Commission's consideration. Alliant takes its role as a critical infrastructure provider very seriously and we do not want to see our 800 MHz communications systems compromised by aggressive efforts to resolve what can be characterized as geographically isolated, system specific interference problems.

If you have any questions please contact me at the below phone number and address. Thank you for your time and consideration in this matter.

Sincerely,

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W/attachment

Alliant Energy Reply Comments

NPRM WT DOCKET NO. 02-55

8/6/02

Interference and Technical Comments

- While the interference problems are real and a chronic concern, the problems are still isolated to highly congested areas and do not affect many licensees. None of the re-banding plans will eliminate interference. They do not prevent inter-modulation or address the high power, “cellularized”, low-site systems.
- Alliant has not experienced interference on its system and does not stand to benefit from relocation and should not have to pay for relocation.
- The FCC should conduct an independent study of the interference claims before imposing any relocation and re-banding solution. Any FCC ruling must address eliminating interference between high-power, low-site transmissions and low-power, high-site receivers.
- Alliant believes that mandated and enforced use of best practices and technological solutions should be implemented.
- The FCC should establish rules and processes to:
 - Require the use of cavity filters to prevent intermodulation and spurious emissions.
 - Tighten standards on emissions masks.
 - Define receiver standards that supports the “Class A” standards in TIA/EIA-603-A
 - Catalog and identify potential sources of interference.
 - Clarify the methods and responsibilities of each party to resolve interference.
 - Establish timelines and arbitration to ensure resolution of interference.

Nextel Proposal and Comments

- Alliant Energy strongly opposes the Nextel proposal.
- Alliant Energy considers itself a critical infrastructure provider. Nextel plan would negatively and severely impact Alliant Energy’s land mobile communication network.
- Relocating Alliant Energy’s network to new frequencies would be expensive and the availability of spectrum is not guaranteed.
- Nextel’s proposal to move incumbent to 700 and 900 MHz relocation bands does not provide sufficient spectrum and are incompatible with Alliant’s iDEN network and legacy trunking systems.
- Nextel’s follow-on proposal to have Alliant and other utilities remain on the 800 MHz band on a secondary. Community or secondary status in 800 MHz is not acceptable for Alliant’s daily critical operations.
- Nextel’s proposal is intended to avoid the responsibility of resolving the interference they are causing with their low-site cellular architecture.
- Nextel should not be allowed to acquire a nationwide, contiguous block of replacement spectrum without meeting the competitive bidding requirements of Section 309(j).

Other Band Realignment Proposals and Comments

- Alliant Energy finds that all of the proposed plans will create unnecessary interruption of service and heavy expense. Alliant also views the plans as risking the availability of sufficient spectrum, while not proving definitive benefits to Alliant Energy and other utility incumbents.
- If Alliant Energy were forced to relocate out of the 800 MHz band, all of its voice and data radio system would have to be replaced. The cost of replacement would easily exceed 25 million dollars and would directly impact the customer rate base.
- Should re-banding be deemed necessary, it should be a voluntary plan that requires relocation costs to be burdened only by those licensees that initially caused the 800 MHz interference problems and/or stand to gain from the relocation.
- The 700 and 900 MHz bands are not good sources of replacement spectrum for 800 MHz spectrum. Current technical restrictions limit the ability to achieve high-quality, reliable operations. In addition there is not enough replacement spectrum comparable to that available in the 800 MHz band.
- Alliant believes a market-based approach would provide the most inexpensive and effective means to resolving interference without involving other licensees. Exchanging/trading of channels should be allowed and inter-category restrictions eliminated for the purpose of interference resolution and effective frequency reuse.
- Most recently, the “Private Wireless Coalition” (PWC) has presented the idea of another alternate re-banding plan. Aside from the market-based approach, the basis of this plan appears to be the least harmful of all the plans, however, the following questions need to be answered to Alliant’s satisfaction before we would endorse this plan.
 - Where will the funding come from for those who need to relocate?
 - What the band plan look like above and below line C?
 - What are the technical standards for those staying in the band?
 - What is the impact to private TDM-based RF system, such as private iDEN?

Public Safety and Critical Infrastructure Concerns

- **Both** public safety and critical infrastructure licensee’s need adequate, interference-free to ensure reliable communications during states of emergency. The FCC must provide measures to preserve the ability to meet current and future spectrum needs of critical infrastructure, including utilities.
- This NPRM proceeding should address interference resolution. Any separate allocation of spectrum for public safety and critical infrastructure licensees should be addressed in another proceeding.
- Nextel’s proposal will harm many critical infrastructure entities that cannot afford its high costs and disruption.
- Alliant does not favor the definitive separation of public safety spectrum from critical infrastructure spectrum. Additional spectrum from public safety system has already been allocated in the 700 MHz band to address new, bandwidth intensive technology, such as wide-band data. Focus and efforts should be redoubled in clearing this existing allocated spectrum. Then, with the movement of certain public safety operations to the new technology to the 700 MHz band, it would leave the 800 MHz band less congested and still allow shared systems and/or interoperability between public safety and critical infrastructure licensees, such as utilities.